

OUTLAND TECHNOLOGY INC.

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UWS-3310/3320 OPERATING INSTRUCTIONS

1. To operate Camera System, all interconnections from the Control Unit, DVR & Monitor, should already be connected but in the event there is a problem drawing # 0010550 shows how those items connect.

CAUTION:

Insure voltage does not exceed 250 volts AC to the Console. Also power source must be properly grounded. Typically 110 VAC to 250 VAC.

2. Plug Camera Umbilical into Camera and light (Be sure to use a good quality silicon grease for lubrication). Plug topside end of umbilical into Control Unit connector on front panel.
3. After verifying supply power is correct, insure camera, light switches are in off position. Plug into power source.
4. Turn Monitor, Recorder and Camera switches on. A picture should appear within a few secs.
5. Insure "Light Intensity" is at "Min" position. Turn light switch on. Turn control up to test light. Turn back to Min. and Turn switch off.

CAUTION:

" Light can be operated out of water but will shut down automatically if the temperature exceeds 50c.

6. The CON-3300 console only outputs 24 VDC maximum.



8.) To Use the recorder please refer to the DVR manual.

Note:

Read the recorder manual for more details concerning the operation of these recorders.

Any problems Please Contact:

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Outland HD Mini DVR Instructions

Initial Setup

- 1.) Turn "Power On" by sliding switch on bottom of DVR towards the right. It is OK to leave the DVR power on all of the time.
- 2.) Install the SD card carefully. Make sure that the orientation of the card is inserted so that the notch on the SD card is on the top left. The SD card should be inserted so that it is flush with the case of the DVR, it should spring-click into place. DO NOT FORCE THE CARD INTO PLACE. If you have trouble, try removing and reinserting the card.

DVR Setup

- 1.) To set time and date:
 - a. Press the "Menu" button.
 - b. Highlight the green "System Setting" button using the arrow keys, then press the center "OK" button.
 - c. Highlight the yellow "Date / Time" button, then press the center "OK" button.
 - d. You may use the arrow keys to modify the date and time.
 - e. When you are finished, press the center "OK" button.
 - f. Press the "Menu" button again, to exit the menu.

Recording Video

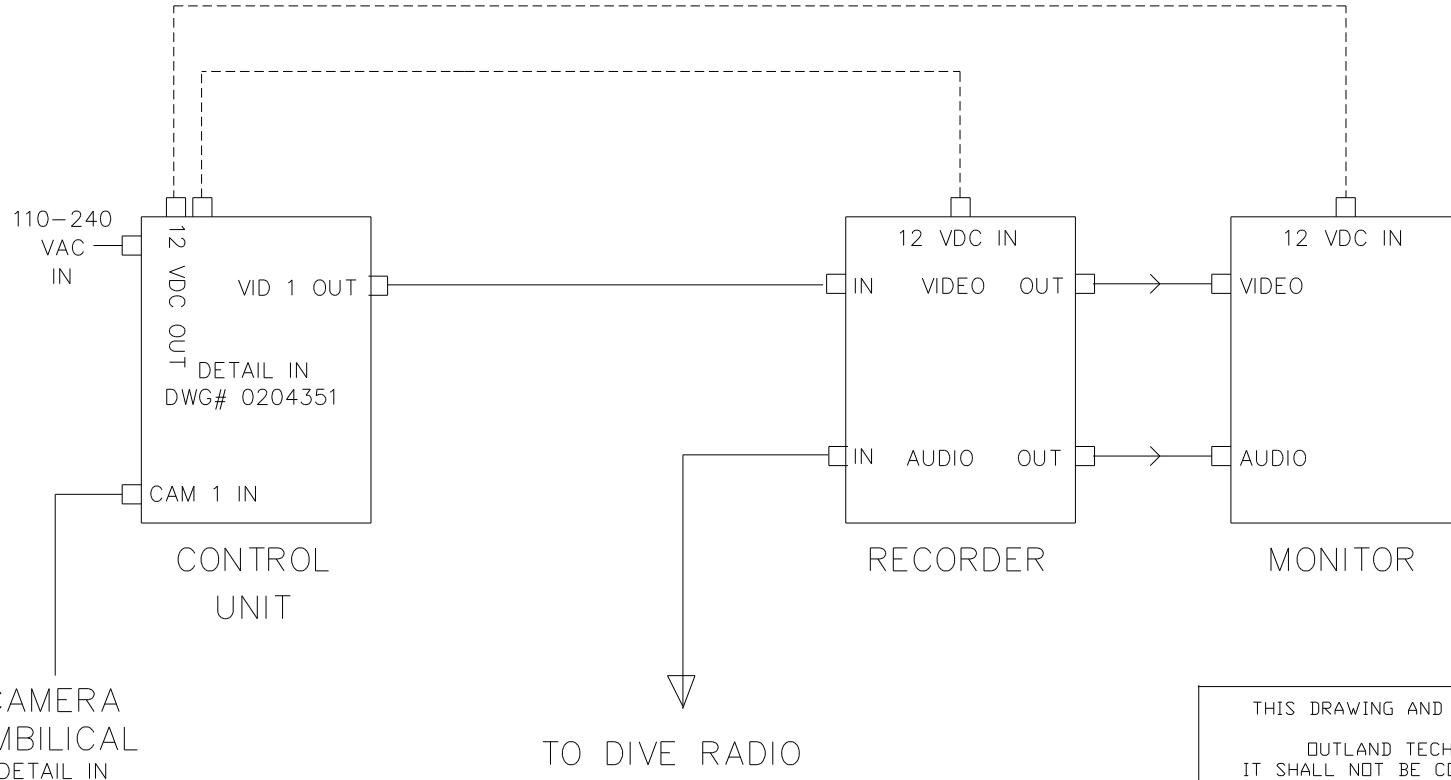
- 1.) Make sure that the DVR is turned on and that there is an SD card installed.
- 2.) In the bottom right hand corner of the screen, there should be a timer, this shows how much recording time is available on your SD card.
- 3.) Press the "Rec" button.
- 4.) Now, you should see a red, circle symbol in the top center of the screen to indicate that recording has started.
- 5.) You should also see the timer in the bottom right, turn red. This shows how long you have been recording.
- 6.) Press "Rec" again to stop recording.

Playing Video on DVR

- 1.) Press the "Play" button.
- 2.) You will see a folder that has date(s). These date(s) represent the times that you have made recordings. If you have multiple dates, they are arranged from oldest down to newest.
- 3.) Using the arrow keys, highlight a date, and then press the center "OK" button.
- 4.) Now, you may see multiple files. These files are the actual video files labeled by the time that the recording was started, also arranged from oldest to newest.
- 5.) Using the arrow keys, highlight a file and press the center "OK" button to play the file.
- 6.) You may use the right, center "OK", and left arrow keys to fast forward, pause and rewind video.
- 7.) Press the "Play" button to exit playback mode.

Playing Video on Computer

- 1.) Carefully remove the SD card from DVR by pressing it inward, it should pop out.
- 2.) You may use the SD card slot that is built in to your computer or use the supplied SD to USB adapter.
- 3.) Insert the SD card, using one of the above methods, into your computer.
- 4.) Now wait a few seconds for your computer to recognize the SD card.
- 5.) Go to "My Computer", "SD Card"
- 6.) Now you should see the video files.
- 7.) Now, click on any of the files and you may play it in any media playing software.
- 8.) The video may also be edited by using third-party software.



CAMERA
UMBILICAL
DETAIL IN
DWG# C-2303B-100m

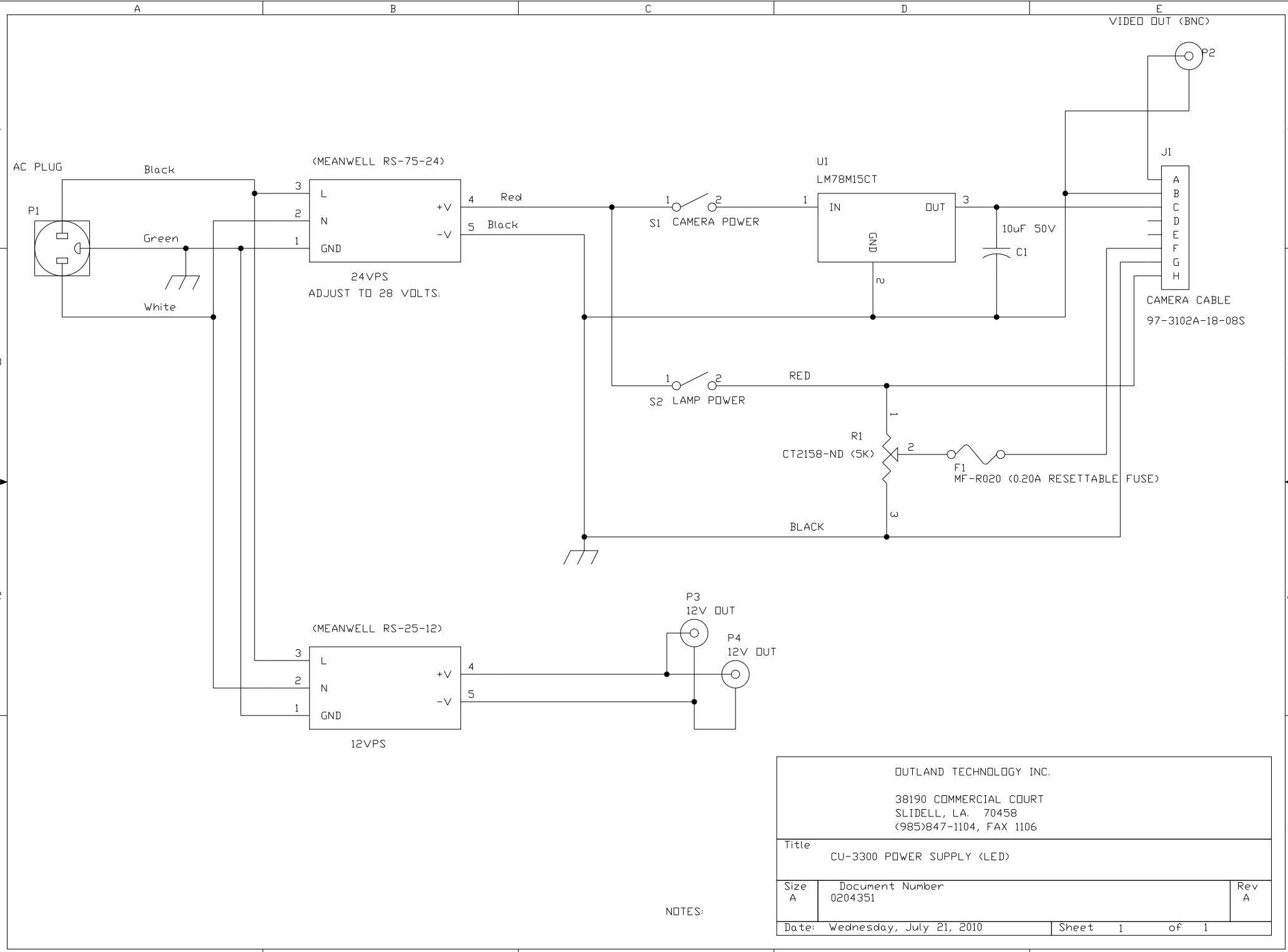
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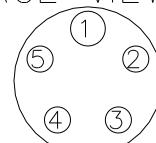
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TITLE
CON-3300 CONSOLE INTERCONNECTIONS

SIZE A	DOCUMENT NUMBER 0010550	REV T
DATE: JULY, 2010	SHEET	



RMK-5-FS
CAMERA CONNECTOR
FACE VIEW



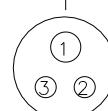
MS3108B-18-08P

VIDEO	A	COAX
GND	B	SHIELD
14-24 VDC	C	2 EA. RED
(DATA+)	D	BLUE
(DATA-)	E	ORANGE
FOCUS	F	2 EA. GREEN
CONTROL, LIGHT	G	5 EA. BLACK
-DC LIGHT	H	5 EA. WHITE
+DC LIGHT		

WHITE	1	VIDEO
BLACK	2	GND
GREEN	3	+14-24 VDC
RED	4	FOCUS (DATA+)(Pan)
ORANGE	5	FOCUS (DATA-)(Tilt)

WH	1	
BLK	2	LIGHT, +24 to 30 VDC
GREEN	3	LIGHT, -DC

LIGHT, CONTROL 0-24 VDC,
(IF NOT USED LIGHT WILL BE FULL ON.)



RMG-3-FS

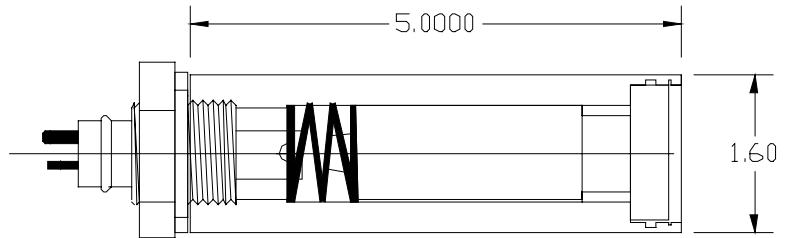
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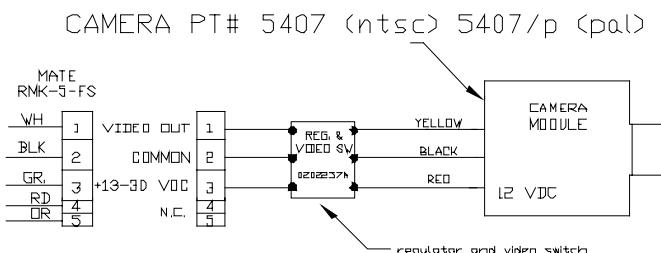
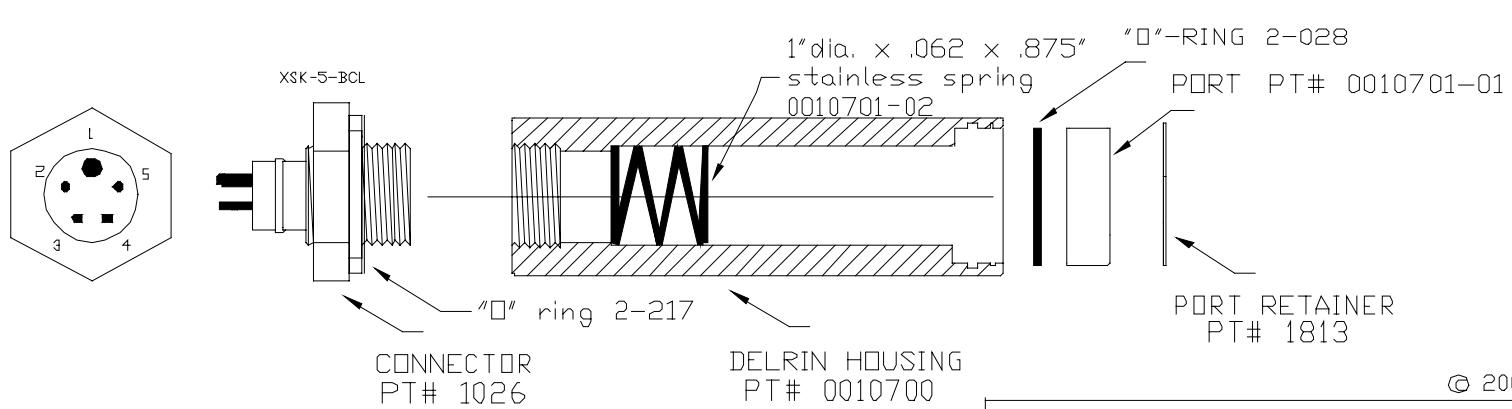
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TITLE
C-2303B CABLE ASSEMBLY

SIZE A	DOCUMENT NUMBER C-2303B-100m	REV
DATE: DEC., 2009		SHEET



The camera comes out the front. Carefully remove the "C" clip. Carefully unscrew the connector. Remember there are wires running from the connector to the camera. Unsolder the 3 wires from the connector, push the camera and port out the front. Reverse the procedure to assemble. The camera must be purged when reassembling.



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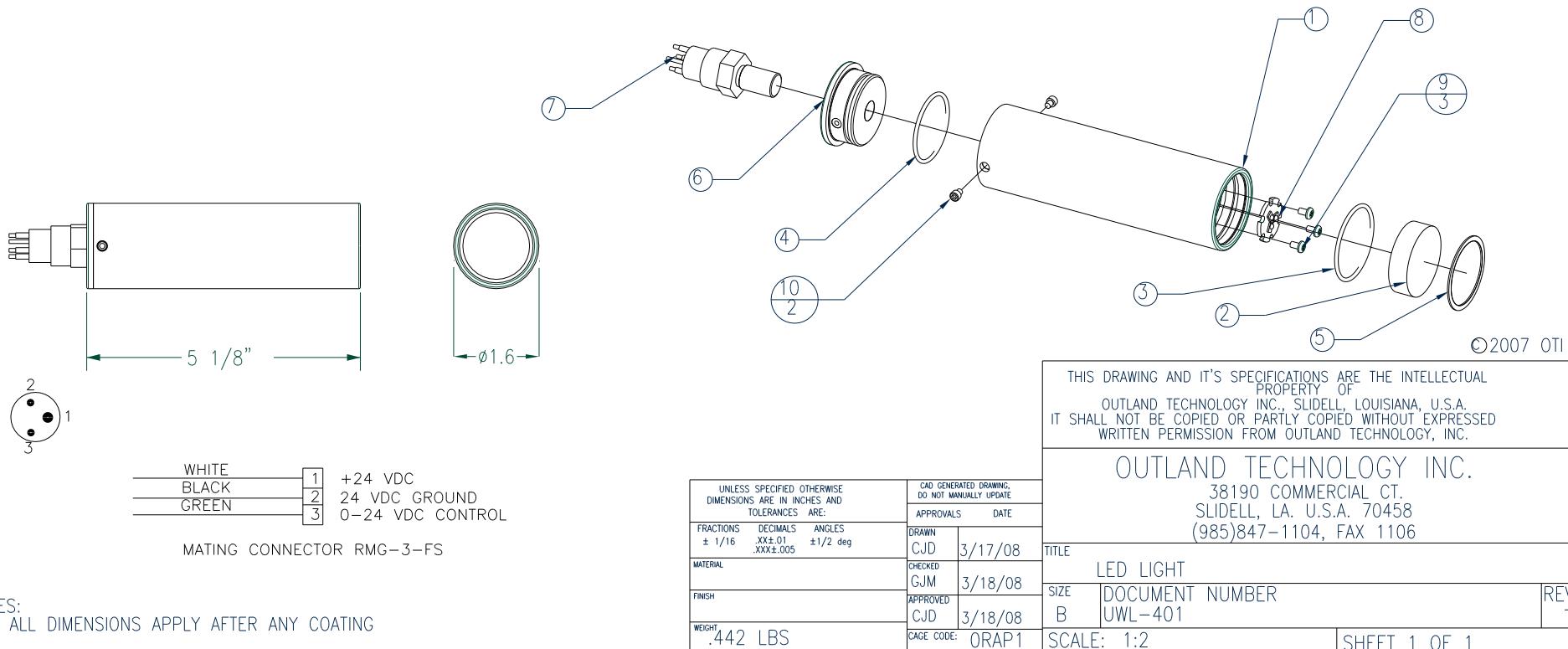
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TITLE UWC-325-P ASSEMBLY

SIZE	DOCUMENT NUMBER	REV
A	0010700	
DATE: OCT., 2001	SHEET	

ITEM NO.	QTY	PART NUMBER	DESCRIPTION	REV	MATERIAL	VENDOR
1	1	UWL-401-01	LED LIGHT HOUSING	-	STAINLESS STEEL 316L	
2	1	0010701-01	VIEWPORT	-	ACRYLIC	
3	1	2-028	O-RING		BUNA-N	
4	1	2-026	O-RING		BUNA-N	
5	1	VH137S16	PORT RETAINING RING	-	STAINLESS STEEL	SMALLEY
6	1	UWL-401-02	LED LIGHT END CAP	-	BLACK ACETAL	
7	1	XSG-3-BCL	3 PIN MALE CONNECTOR	-		
8	1	7007-PWC-XX-X	LED LIGHT MODULE	-		LUXDRIVE
9	3		PHP #4-40 UNC X 3/16		STAINLESS STEEL	
10	2		SHCS #4-40 UNC x 1/8		STAINLESS STEEL	

REVISIONS			
REV	DESCRIPTION	DATE	APPRVD
-	INITIAL RELEASE	3/17/08	CJD



OUTLAND TECHNOLOGY INC.

UWL-401 UNDERWATER LIGHT

Operating and Maintenance Procedures

Reference: DRAWING UWL-401

Installation and Operation:

- A. The UWL-401, can be mounted to your Camera, ROV, Helmet or Hand bracket by using DHM-60 OR HM-300 helmet bracket.
- B. **With Power Off**, lubricate the light mating connector with a light coating of silicon lubricant. Slide the locking sleeve of the mating connector back. Align the raised dot on the connector with the large connector pin on the light connector and plug in. Securely tighten the locking sleeve.

THERE ARE NO USER SERVICEABLE PARTS INSIDE. PLEASE SEND BACK TO THE FACTORY FOR SERVICE.

The only maintenance required is to flush with fresh water and dry for storage.



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LIMITED WARRANTY

Outland has a strong commitment to high quality production. Each product has a twelve (12) month limited warranty against defects in workmanship or materials with the exception of those outlined in the limitations and exclusions. Outland will repair or replace at its discretion the defective components.

Limitations and Exclusions

- The limited warranty does not cover damage caused by improper use, poor maintenance or accidental damage of the product or its components.
- The limited warranty does not cover items subject to wear including but not limited to view ports, o-rings, umbilical, unless found to be defective in workmanship and/or materials.
- The limited warranty does not cover any modification made to these products without authorization from Outland Technology Inc.
- The limited warranty does not cover lamps.
- The limited warranty does not cover components damaged due to incorrect power connection per user's manual.
- The limited warranty does not cover items not actually built by Outland. Example (DVD recorder, Monitor etc.). That would be covered by the manufacturer's warranty.

Advertising claims made by us represent our honest opinion of the qualities and features offered by the products described. We disclaim any warranties expressed or implied, including warranties of merchantability and fitness for a particular purpose, except as provided herein. In no event shall Outland Technology be liable for consequential damages of any kind.

Shipping

All returns for warranty service must be authorized by Outland. You must call or email Outland for a RMA#. The assigned RMA (Returned Materials Authorization) number which must be clearly indicated on each item returned for service.

NOTE: To submit a product or its components for warranty a RMA form must be completed.
Please complete as best and detailed as possible.

For warranty shipping within the first 30 days, Outland will pay for ground shipment on domestic orders incoming and outgoing to a maximum of \$75.00 each way. International shipments will be credited up to \$75.00 US for incoming and outgoing freight charges to Outland Technology Inc.

After 30 days the client is solely responsible for shipping to and from Outland Technology Inc.

During the first 30 days of the warranty period, should faster delivery service be requested, a \$75.00 US credit towards expedited freight for each applicable leg will be given.

If you have any questions regarding the installation and operation of this equipment, or if more information is needed contact:

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**12" TFT-LCD MONITOR
WITH
VIDEO INPUTS**

**288 Video Series
USER'S MANUAL**

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1. Introduction

Product Description

Congratulations on your purchase of the **288 video series** LCD monitor. It incorporates high quality display into a small light-weighted module. It has power-saving capabilities and emits no radiation. You will certainly benefit from this monitor in lots of ways; to name some of them: comfort, safety, space-saving and environmental protection.

These LCD monitors incorporates **12"** color active matrix thin-film-transistor (TFT) liquid crystal display to provide superior display performance. For 12" monitor, the maximum resolution is **SVGA 800 x 600**. **/XGA 1280 x 1024** (optional).They all are ideal for displaying complex graphics and high definition images. Their outstanding capabilities include audio, high image quality with S-video, standard RCA composite video/audio and OSD (On Screen Display) controls.

Package Contents

Included with your LCD monitor as following items :

- **12"** TFT LCD monitor
- 15 pin D-sub VGA signal cable
- Audio cable
- AC power cord
- AC/DC power adapter
- User's manual
- DVI signal cable (optional)

Product Features

- High brightness, high contrast ratio and wide viewing angle
- Wall mountable with VESA 75 bracket
- Power management system conforms to VESA DPMS standard
- Advanced OSD control for picture quality adjustment
- Slim bezel design

Screen Cleaning Techniques

1. Gently clean the screen with a clean camel hair lens brush, or a soft, clean, lint-free cloth, to remove dust and other particles that can scratch the screen.
2. Do not apply pressure to the screen surface when wiping it clean.
3. Do not pour or spray any liquid directly onto the screen or casing. Chemical cleaners have been reported to damage the screen or case of the LCD monitor.

Additional

Read all of these instructions and save them for later use.

Follow all warnings and instructions on the product.

1. Product

- Do not block the vent holes in the case.
- Do not insert sharp objects or spill liquid into the LCD monitor through cabinet slots. They may cause accident fire, electric shock or failure.
- Disconnect the power plug from the AC outlet if you will not use it for an extended period of time.
- Do not attempt to service this product yourself, as opening or removing covers may expose you to dangerous voltage points or other risks.
- Do not touch the screen directly with your fingers. You may damage the screen, and oil from your skin is difficult to remove.
- Do not apply pressure to screen. The LCD panel is very delicate.

2. Power

- Use the type of power indicated on label.

3. Plugs

- Do not remove any of the prongs of the monitor's three-pronged power plug.
- Disconnect the power plug from the AC outlet under following conditions :
 - If you will not use it for an extended period time.
 - When the power cord or plug is damaged or frayed.

- If the product does not operate normally when the operating instructions are followed. Adjust only those controls that are covered by the operating instructions. Improper adjustment of other controls may result in damage and will often require extensive work by a qualified technician.
- If the product exhibits a distinct change in performance, service may be required.

4. Power and extension cords

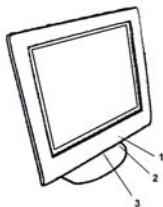
- Do not allow anything to rest on the power cord.
- Do not locate this product where persons will walk over the cord.
- Use the proper power cord with correct attachment plug type. If the power source is 120V AC, use a power cord that has UL and C-UL approvals. If the power source is a 240V AC supply, use the tandem (T blade) type attachment plug with ground conductor power cord that meets the respective European country's safety regulations, such as VDE for Germany.
- Do not over load wall outlets or power cords. Ensure that the total of all units plugged into the wall outlet does not exceed 10 amperes.
- Ensure that the total ampere ratings on all units plugged into the extension cord is not above the cord's rating.
- If the power supply cord, which came with your monitor, is to be connected to the PC instead of the wall outlet, Use an UL/TUV approved computers with receptacle rated 100~240V AC, 50/60Hz, 1.0A (minimum) only.

5. Environment

-
-
- Keep the monitor away from overly hot, cold or humid places, places directly under sunlight, dusty surroundings, equipment that generate strong magnetic fields.
- Please adjust the frequency to **60** Hz after setting up the LCD monitor.
- Then push the OSD menu button and use the auto adjustment function to find the best mode of your computer.

2. Control Functions

The monitor digital control functions are located on the front panel. They are shown in the figure below and described in the following paragraphs.



1. Power indicator LED
2. Power switch
3. Function keys

Function Selection

1. Press the knob “MENU/SELECT” to show the OSD menu. Then use the “▲” and “▼” to select a function. Press the knob “AUTO/EXIT” to close the OSD menu.
2. With the knob “▲” and “▼”, you can adjust the speaker volume on the monitor.
 - When you press the “▼”, the speakers are mute. Press the “▲” and then the speakers are active.
 - When you press the knob “▲”, the speaker volume OSD is shown. You can increase or decrease the volume by pressing the “▲” and “▼”.
3. You can hold the knob “AUTO/EXIT” for more than 1 second to adjust the image quality automatically.

The OSD menu will close automatically after 3-10 seconds without operation and saves any changes you have made.

Function Adjustments

1. Signal Select

When there is no OSD menu display the knob “AUTO/EXIT” can select
VGA / DVI / CVBS / S-VIDEO.

2. Video

Contrast

- Adjust the difference in luminance between light and dark areas of the image.



Brightness

- Adjust the luminance level of the image.



Colour

- Adjust the Color level of the image



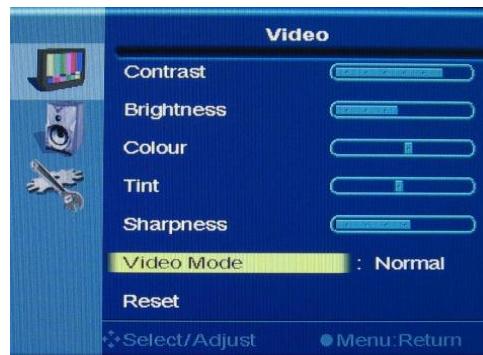
Tint - Adjust the Tint level of the image



Sharpness - Adjust the Sharpness level of the image



Video Mode - Adjust the Video Mode for
Normal/Nature/Cinema/Sport/Vivid



Reset - Recall the factory setting of the **Video** menu.



VGA not used

Contrast - Adjust the difference in luminance between light and dark areas of the image.



Brightness - Adjust the luminance level of the image.



Sharpness - Adjust the Sharpness level of the image



Color Temperature - Adjust Color Temperature

Cool(9300k)/User/Warm(6500k)/Nature(7500k)



User RGB not used - Adjusting R/G/B level of the image



Image



Auto Tune - Adjust geometry of the image automatically.

Position - Adjust the vertical & horizontal position of the image.

Phase - Adjust the horizontal sync phase of signal.

Clocks - Adjust the horizontal sync size of signal.

Reset - Recall the factory setting of the VGA menu.



3. Audio (Video & VGA)

Volume - Adjust the speaker volume.



4. Feature Controls (Video & VGA)

Sleep Timer - Select 10/20/30/40/50/60/70/80/90/Off



Language -Select Language English/Fran/Deu/Esp/Ita



OSD Controls -Select OSD Position /Rotation/Timer



Factory Recall - Recall Factory setting



Installing the Monitor

This monitor is equipped with an auto sensing DC power adapter for voltage ranges of 100-240VAC, 60/50Hz. Follow these steps to install the monitor:

1. Before you connect the cables, made sure that the monitor and the system unit power switches are off.
- 2.
3. Connect the AC/DC power cord to the DC jack.
4. Connect the power cable.

4. Display Modes

Micro-controller Features

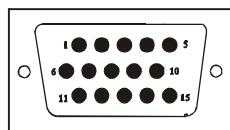
The micro-controller automatically detects the video board installed in your system. When you turn on the monitor, the micro-controller checks the display mode memory stored in the user setting area of the video board, and then the factory presetting area. It then adjusts to the proper display mode. The micro-controller has the memory capacity to store different display modes, including timing formats and display-settings.

Factory Presetting Area

There are some preferred display modes preset in the micro-controller. These display modes are preset at the factory and include the most popular display modes currently available. The micro-controller searches for a proper display mode in this area if it fails to find a proper display mode in the user setting area.

	MODE	Resolution (Dots*lines)	Horizontal Freq.(KHz)	Vertical Freq.(Hz)	Remark
1.	VGA	640×350	31.5	70	Non-interlaced
2.	VGA	720×400	31.5	70	Non-interlaced
3.	VGA	640×480	31.5	60	Non-interlaced
4.	VESA/75	640×480	37.5	75	Non-interlaced
5.	VESA/60	800×600	37.9	60	Non-interlaced
6.	VESA/75	800×600	46.9	75	Non-interlaced

5.



6. Power Saving Features

When the power saving is active, the power indicator LED will be from Green Light to Amber. The power saving feature complies with these VESA power saving modes:

Mode	H. Sync.	V. Sync.	LED	Power Consumption
Normal	On	On	Green	< 30 Watts
Stand-by	Off	On	Amber	< 5 Watts
Suspend	On	Off	Amber	< 5 Watts
Off	Off	Off	Amber	< 1 Watts

The monitor uses the H. Sync and V. Sync signals to determine the operation mode to enter.

The monitor power-saving feature automatically turns off H. Sync and V. Sync if there is no input from the system for a certain period of time. To use this feature, you need a green PC that is compliant with the VESA power saving feature or a software utility to detect system input such as keyboard or mouse.

Time Settings

Time settings are adjusted from the system unit by software. To fulfill the requirements in the NUTEK specification 803299/94 the total time from indicated inactivity to Power Saving position A2 (VESA OFF) must not be set more than 70 minutes. We recommend you switch off the monitor when you do not intend to use it for a while.

7. Product Specifications

7.1 288V series product specifications

Model Features	288V Series
Panel Type: Screen Size: Pixel Pitch: Brightness: Contrast Ratio: Response Time: Viewing Angle(H / V) Max. Resolution: Display Color	Active TFT-LCD 12" diagonal 0.3075 (W) x 0.3075 (H) mm Typical: 400 cd/m ² Typical: 500:1 Typical: 35 ms Typical: 140° / 110° 800 (W) x 600 (H) 262 K
Video Input	Analog: 15-pin, D-sub connector x1 S-Video x1, RCA composite x1 Digital: DVI connector (optional)
Display Area	9.7 (W) x 7.2 (H) inch [246 (W) x 184 (H) mm]
Input voltage: Output rating:	100-240V /60-50Hz 12V DC, 2.0A
Power Consumption	25 watts (max.), 3 watts (standby)
Audio	1.0 watts x 1 built-in speaker RCA composite x1
Frequency	Horizontal: 30-47 KHz; Vertical: 50-75 Hz
Dimensions(set size)	13.4 (H) x 14.4 (W) x 7.7 (D) inch [340(H) x 365(W) x 195(D) mm]
Safety & EMI	UL, CUL, FCC-B, CB, CE, TUV/GS
Weight	N.W.: 6.6 lbs (3.0 Kgs) G.W.: 7.9 lbs (3.6 Kgs)
Operating Conditions	5°C – 35°C; 20%-80% RH
Storage Conditions:	-20°C – 60°C; 10%-90% RH
Wall mountable	Yes, VESA 75 bracket

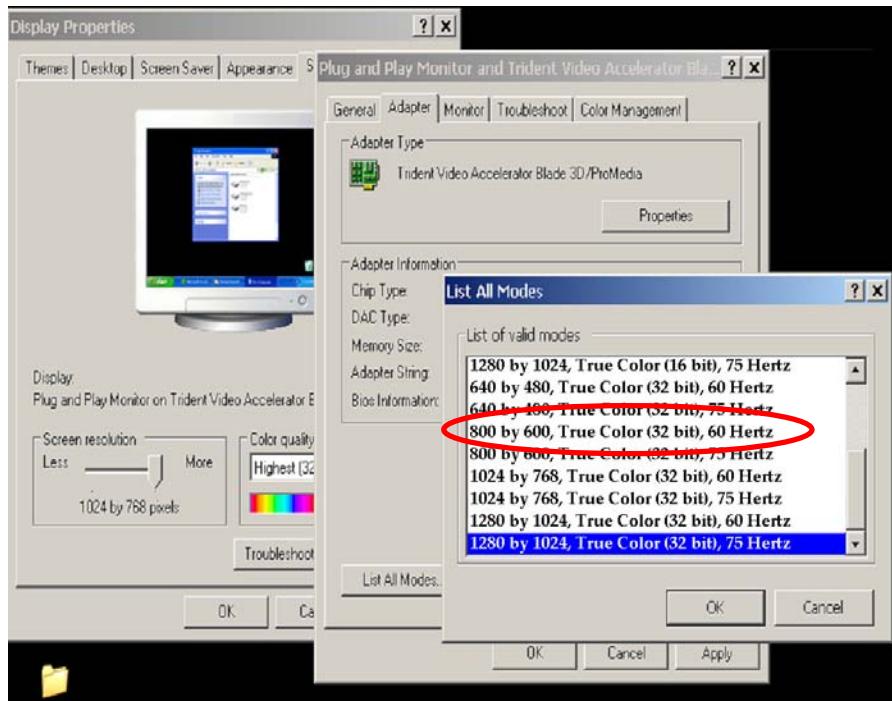
The typical value of brightness, contrast ratio, response time and viewing angle is subject to change without notice.

8. Win setup

For the best display quality, please set the monitor type in Windows.

Control Panel > Display > Settings > Advanced > List All Modes

For 800 ×600, please set to “SVGA 800 × 600 @ 60Hz”



9. Trouble Shooting

1) Power on but no picture

- Make sure the VGA cable is tightly connected from the video output connector on the video card to the video input connector on the monitor.
- Make sure you are using the standard power adapter coming with the monitor.
- Check your video card if the driver is correctly installed. If there is no video signal from the video card, “NO INPUT SIGNAL” will show on the screen.

2) Wrong or abnormal colors

- If any color (red, green, or blue) is missing, check video cable to make sure it is securely connected. Loose pins in the cable connector can cause a bad connection.

3) The text and icon look blurry

- LCD monitor has a native resolution which pixels are produced by cells in fixed positions. When a resolution different from the native resolution is chosen, the LCD monitor uses various interpolation methods to achieve the pseudo resolution. To achieve the optimum viewing quality, choose the native resolution of the panel is recommended.
- Use “Auto Tuning” function to adjust image quality on the OSD menu or you can hold button “AUTO/EXIT” for 1 seconds to do auto tuning.

4) Display position is incorrect

- Use “Auto Tuning” function to adjust image position on the OSD menu or you can hold button “AUTO/EXIT” for 1 seconds to do auto tuning.

5) Speakers have no sound

- Make sure the audio cable is tightly connected from the audio output jack on the PC to the audio input jack on the monitor.

6) Residue image

→ If an image remains on the screen for an extended period of time, it may be imprinted in the screen and leave a residue image. It is characteristic of liquid crystal and is not malfunction or deterioration of the liquid crystal. The residue image will disappear after a period of time. It is recommended to set up the screen saver for your LCD monitor.

7) Out of Range

→ The first thing you need to check is the screen resolution. Usually “Out of Range” is caused by improper resolution setting. You can recover the proper screen resolution as the following steps for Windows: (Assumed that the optimal resolution and frequency setting is 800x600@ 60Hz.)

Boot the computer into **VGA Mode** (F8) [repeatedly] at startup.

Go to “**Control Panel**”, double click on “**Display**”, click on the **SETTINGS** TAB, and click on the **ADVANCED** button.

Then Click on the **Adapter** TAB, click “**List All Modes**” and change the screen resolution to 800x600. (You can select 16 bit or 32 bit color which depends on your video card capability.)

Select “**800 by 600, High Color (16 bit), Default Refresh**”

Click on the “**OK**” and “**APPLY**”.

After clicking the **APPLY** button, a message will be displayed “Your desktop has been reconfigured. Do you want to keep these settings?”

Click “**Yes**” and “**OK**”. Then click “**OK**” on the Display Properties window. Restart your PC

After you restart, go back to “List All Modes” to adjust your screen refresh rate to 60 Hertz.

The “Out of Range” may happen if you switch monitor A to monitor B for your PC. Whenever you change the monitor for your PC, your PC may detect it as a new hardware and automatically install a proper driver for the monitor. So, you will have both monitor A and monitor B drivers on your PC. Sometimes the two monitor drivers may conflict each other and cause “Out of Range”. You can resolve “Out of Range” by uninstalling both monitor drivers and reboot your PC. The Windows will automatically detect the new hardware and install a proper driver for the monitor. Here is a quick way to uninstall the monitor drivers:

Right click on “**My Computer**”, select “**Properties**” and click on “**Hardware**”. Click on “**Device Manager**”, select “**Monitor**” and click on “+” in front of “Monitor”. Then you can see one of the monitor drivers called “**Plug and Play Monitor**”. A quick way is to uninstall all the monitor drivers and then let Windows automatically detect the new hardware. (Right click on the monitor driver and select “Uninstall”).

Restart your PC